

### **REMARKS/ARGUMENTS**

Claim 1 is pending in the present application. New claims 2-8 have been added. Reconsideration of the pending rejection is respectfully requested for the following reasons.

The Office rejected claim 1 under 35 U.S.C. §103(a) as being unpatentable over Finnemore et al. (6,514,557 B2) in combination with Cheong et al. (6,878,420). The Office contends Finnemore teaches all limitations of claim 1 except the substrate being monocrystalline strontium titanate and further contends that Cheong teaches producing crystalline  $\text{MgB}_2$  film on a crystalline sapphire or strontium titanate. The Office then contends that one would have come up with the process in claim 1 by combining Finnemore and Cheong. The Office, however, does not point out the reason why one skilled in the art would expect a high critical density from the crystalline  $\text{MgB}_2$  film resulting from the combination of Finnemore and Cheong. The Office Action merely states that "the expectation of achieving a crystalline coating having a higher critical density as a result of the crystalline nature of the substrate." See Office Action, page 3. The Office must point out a teaching which enables one to expect such a high critical density from such a crystalline  $\text{MgB}_2$  film in order to establish the *prima facie* case of obviousness. The Office does not even explain why one would expect "achieving a crystalline coating having a higher critical density as a result of the crystalline nature of the substrate." As much as such expectation is from the instant application, the Office is relying on hindsight, and has not met its burden of issuing an obviousness rejection.

Applicants could not find such a teaching in Cheong. If the Office is aware of such a teaching in Cheong or other references, the Office must point out that teaching to establish the *prima facie* case of obviousness for the outstanding rejection. Otherwise, the rejection is improper and should be withdrawn.

Further, concurrently with the instant amendment, applicants file a declaration with exhibits showing that an invention date of the instant application is prior to March

12, 2001, but not prior to January 1, 1996. Therefore, applicants believe that Cheong is not prior art. New claims 2-8 are drawn similar to claim 1 and applicants believe that they are patentable over prior art.

In view of the foregoing, applicants submit that all pending rejections have been overcome and the present application is in condition for allowance. Therefore, applicants respectfully request the allowance of the instant application. The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to Deposit Account No. 02-2135.

Respectfully submitted,

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